## USA Staffing

# Assessment Scoring and Weighting Decision Guide

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# Overview

This document will help guide your decisions regarding which scoring and weighting approach to use for a given assessment questionnaire in USA Staffing. The guide will walk you through a number of decision points and show you how to implement each decision in the USA Staffing system. Please keep in mind – although this document is intended to serve as a job aid, there may be other ways to score your assessment questionnaire that are not outlined here.

Before moving through the guide, consider whether you seek to replicate scoring from an existing questionnaire or whether you are developing a new questionnaire to fill a hiring need. Also, before setting up your assessment questionnaire in USA Staffing, be sure you have the supporting documentation necessary for use of the assessment questionnaire, including the scoring protocol (e.g., job analysis results, documented input/approval from Subject Matter Experts (SMEs)).

# Decision #1: Which Scoring Option Should Be Selected

Before making this decision, it's important to understand the scoring options available under the Weight-Based Rating Method and when each is most appropriate to use.

## What is Competency-level Scoring and when is it most appropriate to use?

Competency-level Scoring is designed to measure possession of competencies needed for successful job performance. As a default in USA Staffing, questionnaires using Competency-level Scoring weight competencies equally, regardless of the number of items under each competency.

Competency-level Scoring is most appropriate when: 1) your new or existing assessment questionnaire contains items that link to specific competencies critical to the position, and 2) you want to weight each competency the same or differentially. You must have documentation (e.g., job analysis results, documented input/approval from SMEs) supporting the criticality (i.e., importance and needed at entry) of these competencies for the position.

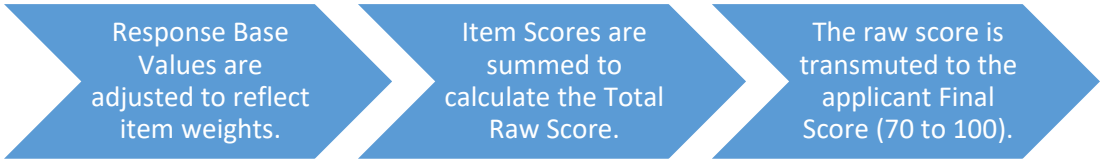
As illustrated in the graphic below, with Competency-level Scoring, the values associated with each response option, also called the Baseline Response Option Values or Response Base Values, are automatically adjusted to reflect item and/or competency weights. Base Values are also adjusted to accommodate differences in the maximum number of points possible for each item. The resulting Item Scores (the Final Response Option Values associated with the response options selected) are then averaged within each competency to calculate Competency Scores. Competency Scores are summed to calculate a Total Raw Score. The Total Raw Score is then transmuted to the final Transmuted Score, also called the Final Score, which is on a 70 to 100 scale. Keep in mind that the number of questions linked to each competency does not change the competency's impact on the Total Raw Score (or Final Score).

## What is Item-level Scoring and when is it most appropriate to use?

Item-level Scoring is intended to measure training and experience on a collection of independent items that either do not fit neatly under specific competencies or are designed to measure broad technical competence. When using Item-level Scoring in USA Staffing, all items must be linked to a single competency (e.g., Technical Competence).

Item-level Scoring makes the most sense when: 1) you are assessing a group of independent tasks vs. specific competencies, 2) the tasks do not fit neatly under specific competencies, 3) you are measuring a single competency, or 4) you otherwise want to weight each individual item (vs. each competency) the same or differentially.

As indicated in the graphic below, with Item-level Scoring, the Base Values are adjusted to reflect item weights and to accommodate differences in the maximum number of points possible for each item. The resulting Item Scores are summed to calculate the Total Raw Score. The raw score is then transmuted to produce the Final Score, which is on a 70 to 100 scale. By default in USA Staffing, questionnaires using Item-level Scoring weight each item equally, regardless of the number of response options under each item or the values associated with the response options. In other words, the number of response options or points possible for a given item does not change the item's impact on the Total Raw Score (or Final Score).




## What is Response-level Scoring and when is it most appropriate to use?

Response-level Scoring is designed for questionnaires using items with custom rating scales (response options and corresponding values) developed in coordination with SMEs. The Base Values for questionnaires using Response-level Scoring are not automatically weighted (equally or otherwise) by competency or item. Instead, as indicated below, Item Scores (in this case, the values associated with each response option) are simply summed to determine the applicant's Total Raw Score, regardless of the competencies to which the items are linked. The raw score is then transmuted to produce the applicant's Final Score, which is on a 70 to 100 scale.

Response-level Scoring makes the most sense when you want to: 1) score items without item and/or competency weights, 2) use Item-level Scoring with items linked to more than one competency, or 3) maintain a Task-based Scoring protocol used in USA Staffing Legacy.

The table below provides a quick recap of each scoring method and when each may be most appropriate.

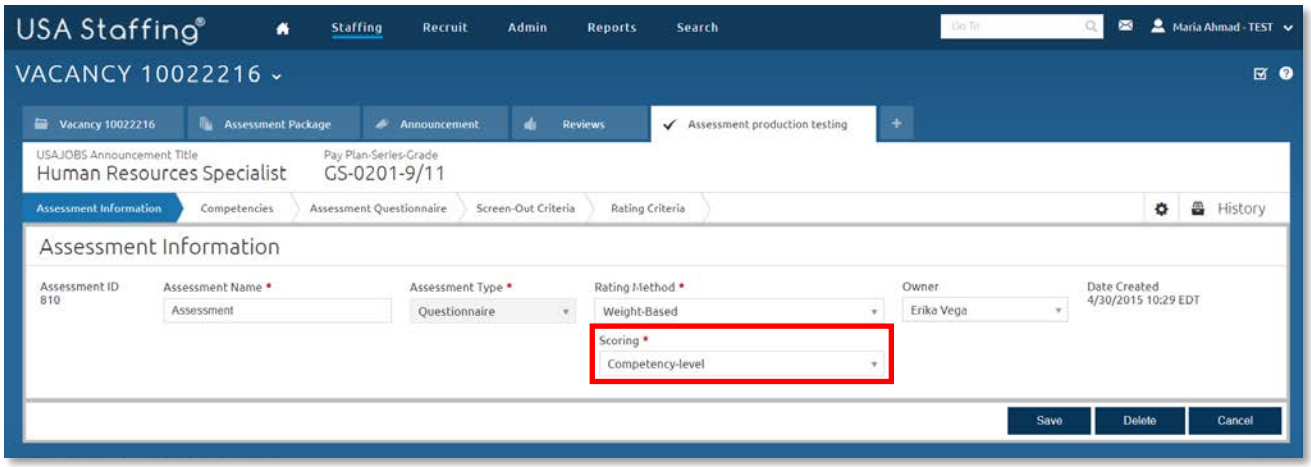
| SCORING | MOST APPROPRIATE WHEN: |
|---|---|
| Competency-level | • Your assessment questionnaire contains items that link to specific competencies critical to the position, and<br>• You want to weight each competency the same or differentially. |
| Item-level | • You are assessing a group of independent tasks vs. specific competencies,<br>• The tasks do not fit neatly under specific competencies,<br>• You are measuring a single competency, or<br>• You otherwise want to weight each individual item (vs. each competency) the same or differentially. |
| Response-level | • You want to score items without (system-generated) item and/or competency weights,<br>• You want to use Item-level Scoring with items linked to more than one competency, or<br>• You want to maintain a Task-based scoring protocol used in USA Staffing Legacy. |

## Which scoring approach do you intend to use for this assessment?

| Competency-level | Item-level | Response-level |
|---|---|---|

# Competency-level Scoring

Competency-level Scoring is the default selection when you create a new assessment questionnaire that uses the Weight-Based Rating Method.




Once you've determined that Competency-level is the most appropriate scoring method, a useful next step is to develop an assessment plan using a table like the one outlined below for each rating (series/grade) combination. This will help you visualize how many competencies are in the questionnaire and how many items link to each competency. In addition, if you plan to assign more weight to certain competencies relative to other competencies based on your job analysis, you can note the competency weights here.

| Competency | Rating Combination (e.g., GS-9) | | Rating Combination (e.g., GS-11) | |
|---|---|---|---|---|
| | # of Items | Competency Weight | # of Items | Competency Weight |
| Competency A | | | | |
| Competency B | | | | |
| Competency C | | | | |
| Competency D | | | | |

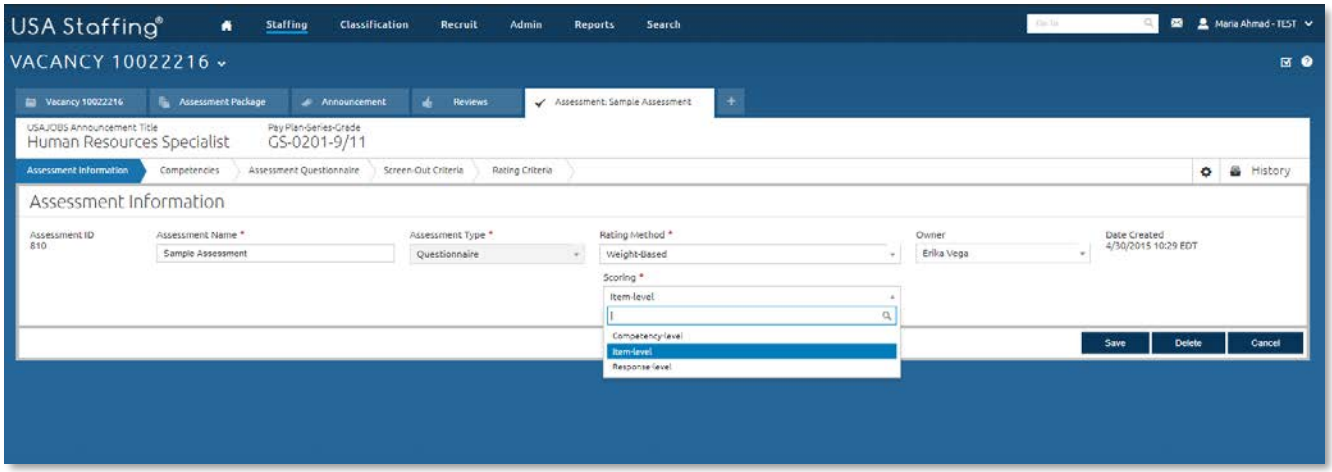
This also would be a good place to note the item formats in your questionnaire (i.e., Multiple Choice - Single Select and/or Multiple Choice - Multiple Select), as well as the types of rating scales you use (i.e., generic/default and/or custom, as well as number of response options for each scale). This information will be important as you move through the decision guide. To review how questions can be linked to competencies in USA Staffing, see Linking Items to Competencies.

Go back to **Decision #1: Which Scoring Option Should Be Selected?**

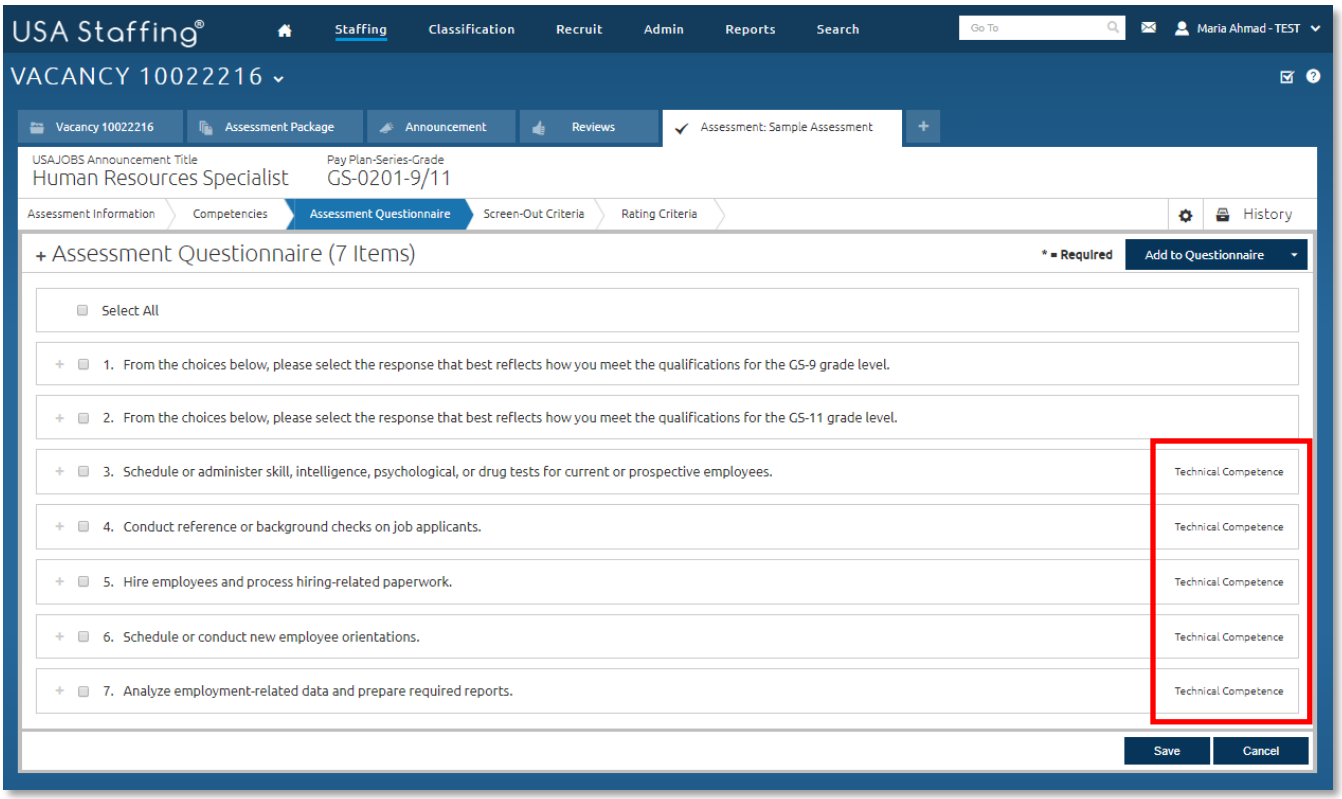
Proceed to **Decision #2: How Should Competencies Be Weighted?**

# Item-level Scoring

To change your assessment to Item-level Scoring in USA Staffing, open the Scoring drop-down menu and select Item-level.




**When using Item-level Scoring in USA Staffing, you must link all of your items to a single competency** (e.g., Technical Competence). By doing this, you will be able to see all items at the same time and can set your Proportional Item Weights (discussed at a later decision point) accurately. By linking all items to the same competency, even if items differ in terms of the maximum number of points possible (i.e., have different Maximum Base Values), USA Staffing will adjust the Base Values accordingly so all items are given the correct final weight in the overall assessment. To review how the questions can be linked to competencies in USA Staffing, see [Linking Items to Competencies](#).



If your job analysis supports linking items to multiple competencies, consider whether Competency-level Scoring or Response-level Scoring may be more appropriate than Item-level Scoring.

- With **Competency-level Scoring**, Item Scores are averaged within each competency to calculate Competency Scores. Competency scores are then summed to calculate a Total Raw Score. The number of items within each competency does not change the competency's impact on the Total Raw Score (or final Transmuted Score). If you think Competency-level Scoring may be a better scoring approach for the assessment, see the Competency-level Scoring section for instructions on setting this up in USA Staffing.
- With **Response-level Scoring**, Item Scores are not weighted (equally or otherwise) by competency or item. Instead, the values associated with the selected response option for each item are simply summed to determine the applicant's Total Raw Score, regardless of the competencies to which the items are linked. The raw score is then transmuted to produce the final Transmuted Score, which is on a 70 to 100 scale. If you think Response-level Scoring may be a better scoring approach for the assessment, see the Response-level Scoring section for instructions on setting this up in USA Staffing.

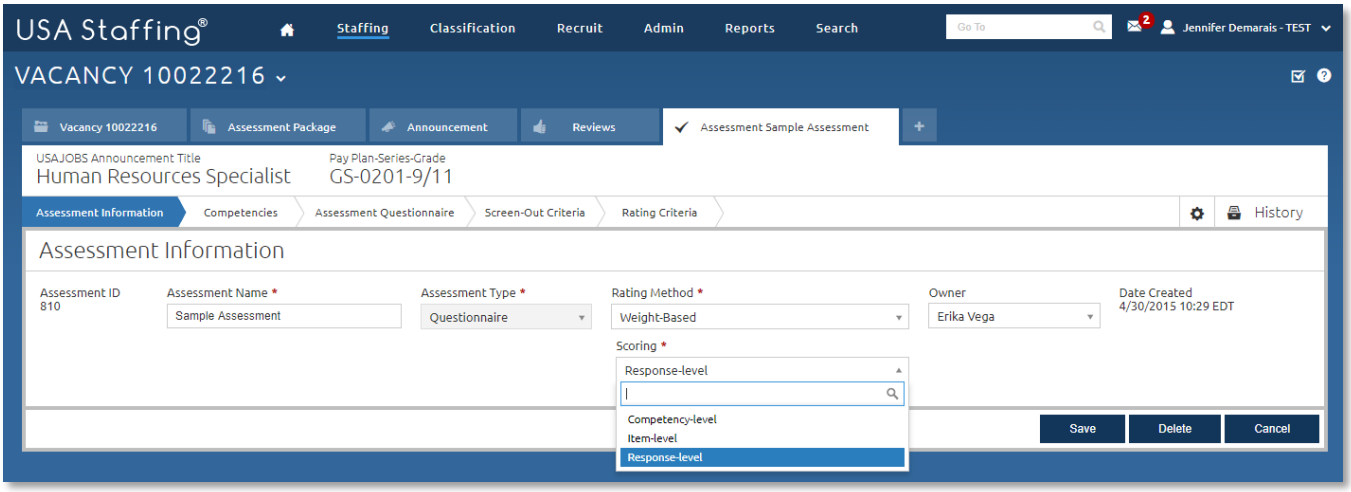
Depending on the complexity of your questionnaire, it may be helpful to develop an assessment plan (see sample under Competency-level Scoring) for each rating (series/grade) combination that outlines: the number of items on the questionnaire, whether you plan to assign more weight to certain items relative to others based on your job analysis, item formats you plan to use (i.e., Multiple Choice - Single Select and/or Multiple Choice - Multiple Select), and the type of rating scale(s) you plan to use (i.e., generic/default and/or custom, as well as number of response options for each scale). This information will be important as you move through the decision guide. Note: Since Item-level Scoring uses a single competency, you can skip Decision #2: How Should Competencies Be Weighted.

Go back to **Decision #1: Which Scoring Option Should be Selected?**

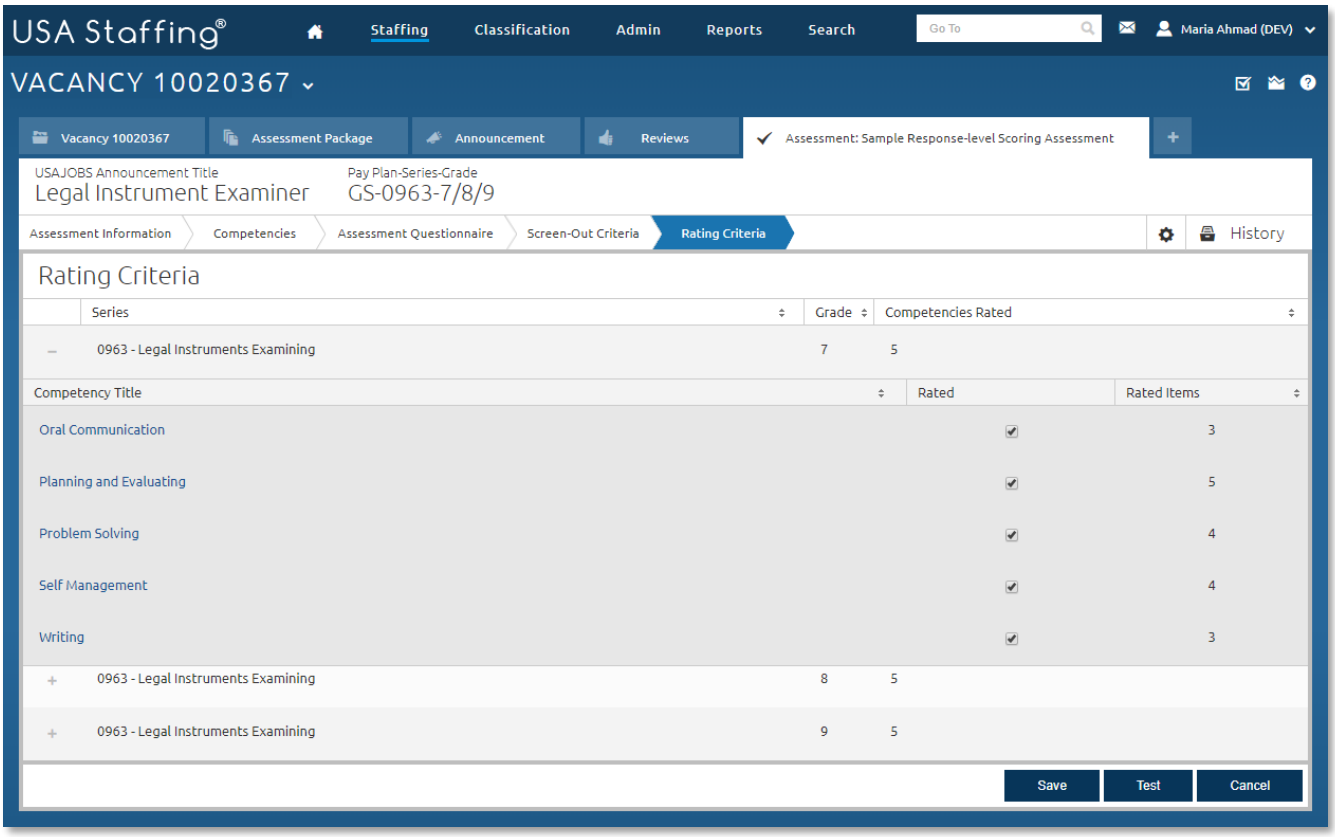
Proceed to **Decision #3: How Should Items Be Weighted?**

# Response-level Scoring

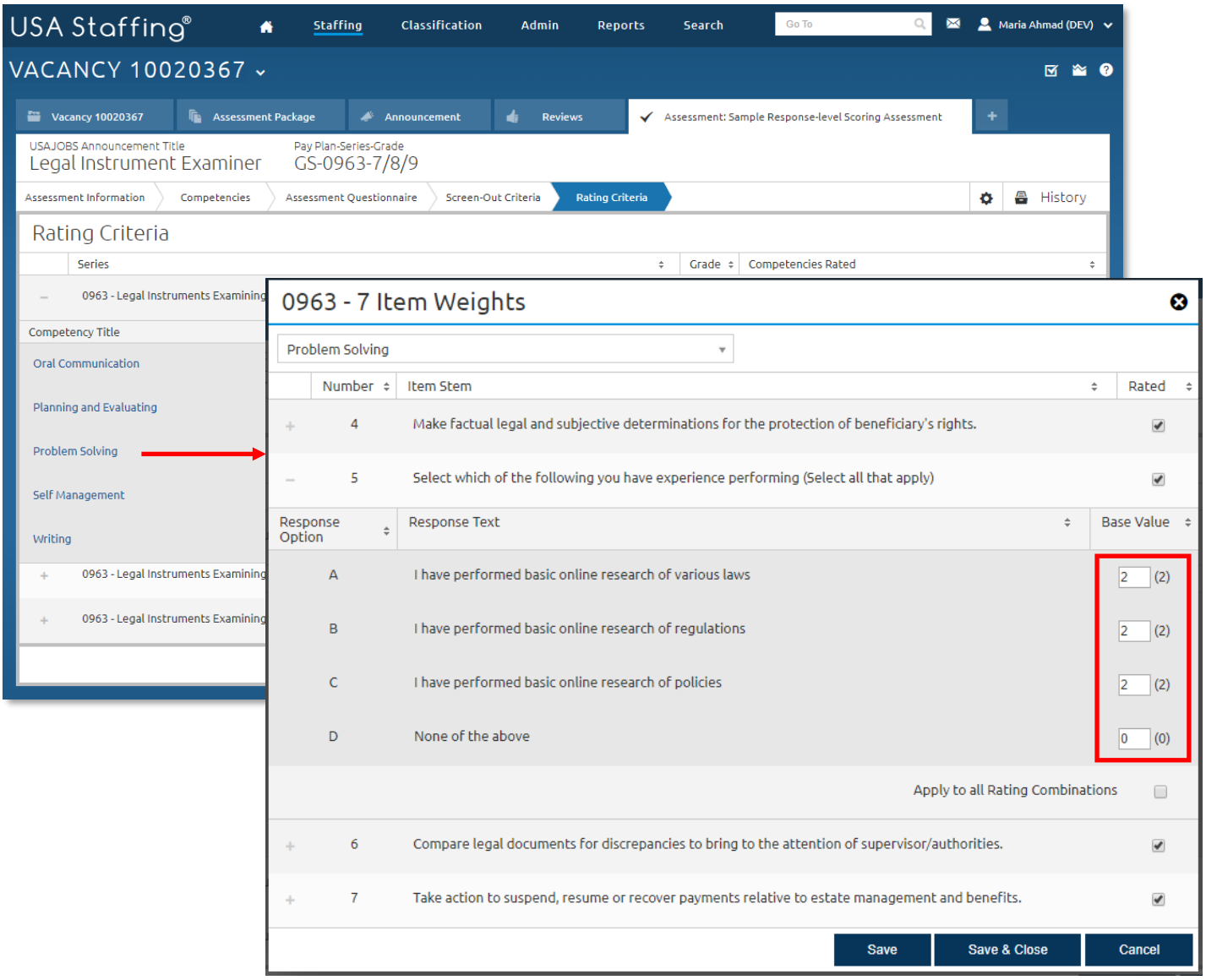
To change your assessment to Response-level Scoring in USA Staffing, open the Scoring drop-down menu and select Response-level.




Mathematically, Response-level Scoring is the most basic scoring option in that competency and item weights are not applied. In other words, competencies and items are not weighted equally by default. In fact, competency and item weights cannot be applied at all; only the response option Base Values can be edited. Unlike Item-level Scoring, with Response-level Scoring items may be linked to multiple competencies. To review how the questions can be linked to competencies in USA Staffing, see [Linking Items to Competencies](#).



With Response-level Scoring, the Base Values associated with each response option are always the same as the Final Response Option Values (values shown in parentheses **( )** for each response on the Rating Criteria page). As a reminder, Response-level Scoring assumes coordination with SMEs and a logical rationale based on supporting job analysis information to determine the worth (Base Value) of each response option.



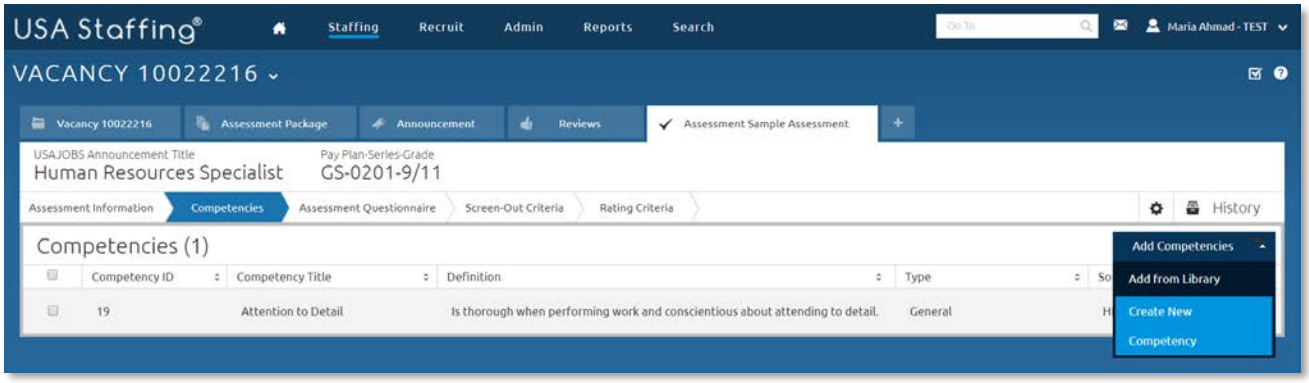

Note: Since Response-level Scoring does not use Competency or Item-level weights, you can skip to Decision #4: How Should Points Be Assigned to Item Response Options?

Go back to **Decision #1: Which Scoring Option Should be Selected?**

Proceed to **Decision #4: How Should Points Be Assigned to Item Response Options?**

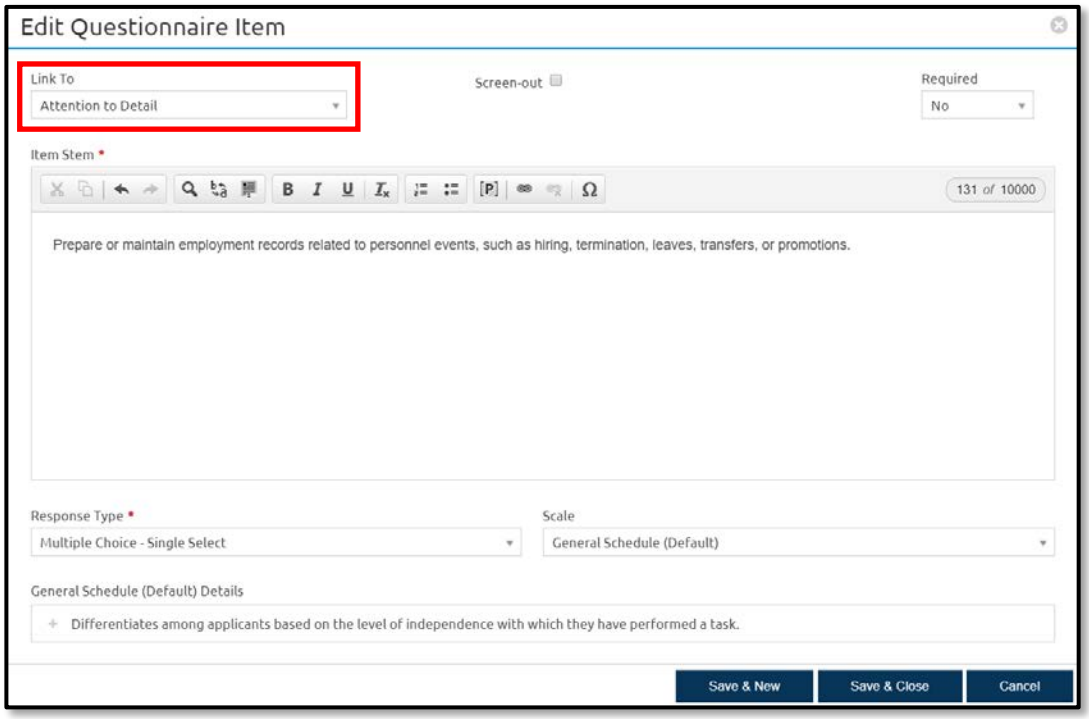
# Linking Items to Competencies

If you add items to the **Assessment Questionnaire** page by pulling them from the Library, they will be automatically linked to the appropriate competency. Otherwise, on the **Competencies** page, you will need to add the individual competencies from the Library (using the **Add from Library** option) or create your own (using the **Create New Competency** option).

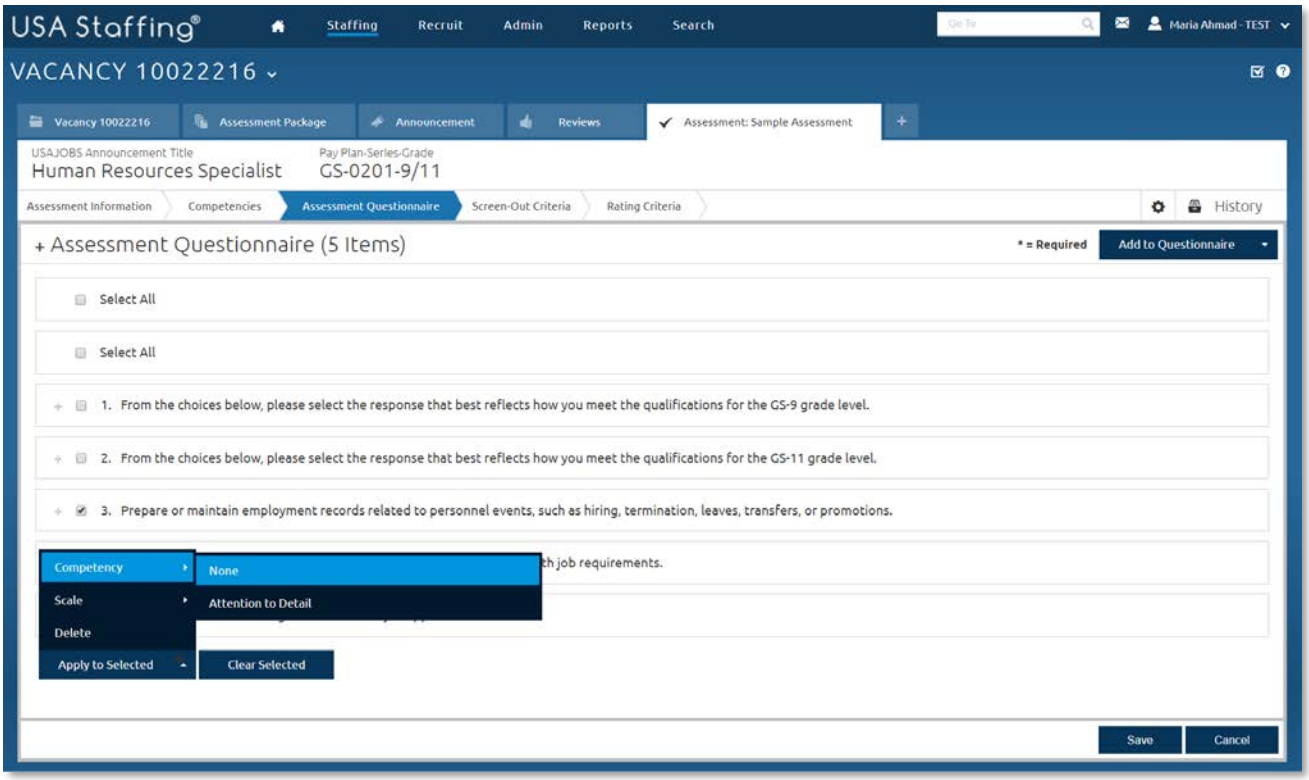



Once your competencies have been added, you can link items to those competencies on the **Assessment Questionnaire** page in a few different ways:

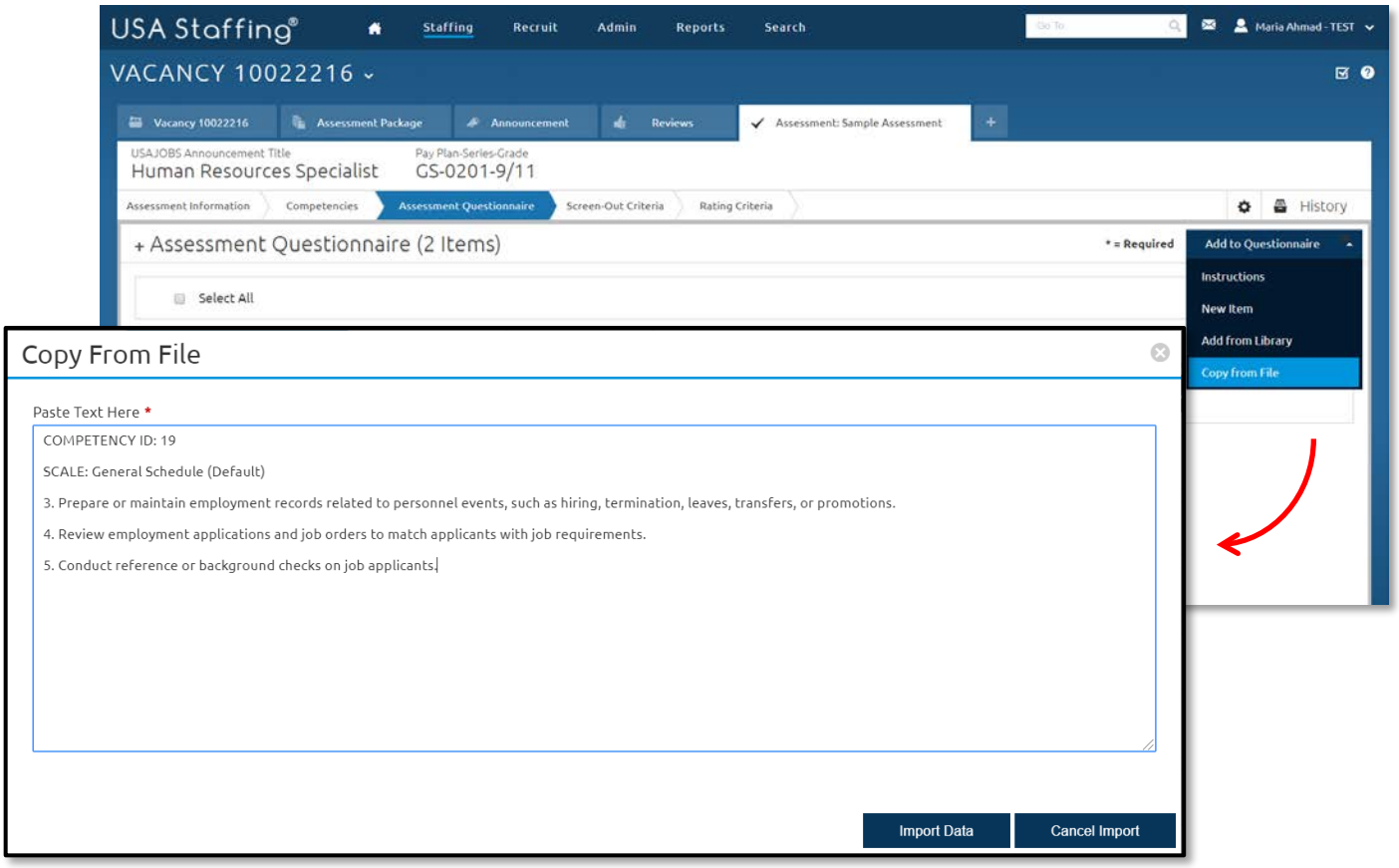
1. When you create/edit an item, you can select the competency in the **Link To** drop-down menu, or




2. After adding the items, you can select the checkboxes next to them and from the **Apply to Selected** drop-down menu, choose **Competency** to link the appropriate competency, or




3. If using the **Copy from File** option, you can enter the key words **COMPETENCY ID:** followed by that competency's ID number, which can be seen on the Competencies page. Any items that follow those key words will be automatically linked to that competency when the text is imported.



# Decision #2: How Should Competencies Be Weighted?

By default in USA Staffing, all competencies are weighted equally. However, if your permission profile allows, you may change the weight assigned to each competency. Before deciding whether to equally weight competencies or differentially weight competencies, it is important to understand when each practice is most appropriate.

## When is it most appropriate to equally weight all competencies?

When you equally weight competencies, each competency contributes equally to an applicant's total score for the assessment. For example, if you have four competencies, the score on each competency makes up 25% of the total score on the assessment.

Equal weighting of competencies is most appropriate when:

1. Job analysis ratings show competencies are equally important,
2. There is a lack of detailed job analysis information to support differential weighting of competencies, and/or
3. There is a lack of SME availability to provide input into weighting of competencies.

**Equal weighting of competencies is a robust practice and is generally the most effective and defensible course of action in the absence of a clear and documented rationale for doing otherwise.**

## When is it most appropriate to differentially weight competencies?

When differentially weighting competencies, the competencies assigned a higher weight will contribute more toward an applicant's total score on the assessment. For example, if you have three competencies and want one competency to receive twice as much weight as the other two, that competency would make up 50% of the applicant's total score. The other two competencies would each make up 25% of the total score.

Differential weighting of competencies is appropriate when all of the following occur:

1. You have documented evidence of the validity of the differential weighting plan (e.g., job analysis showing some competencies are more important than others),
2. SMEs understand, support, and approve the differential weighting plan, and
3. You understand the measurement implications of differentially weighting the competencies.

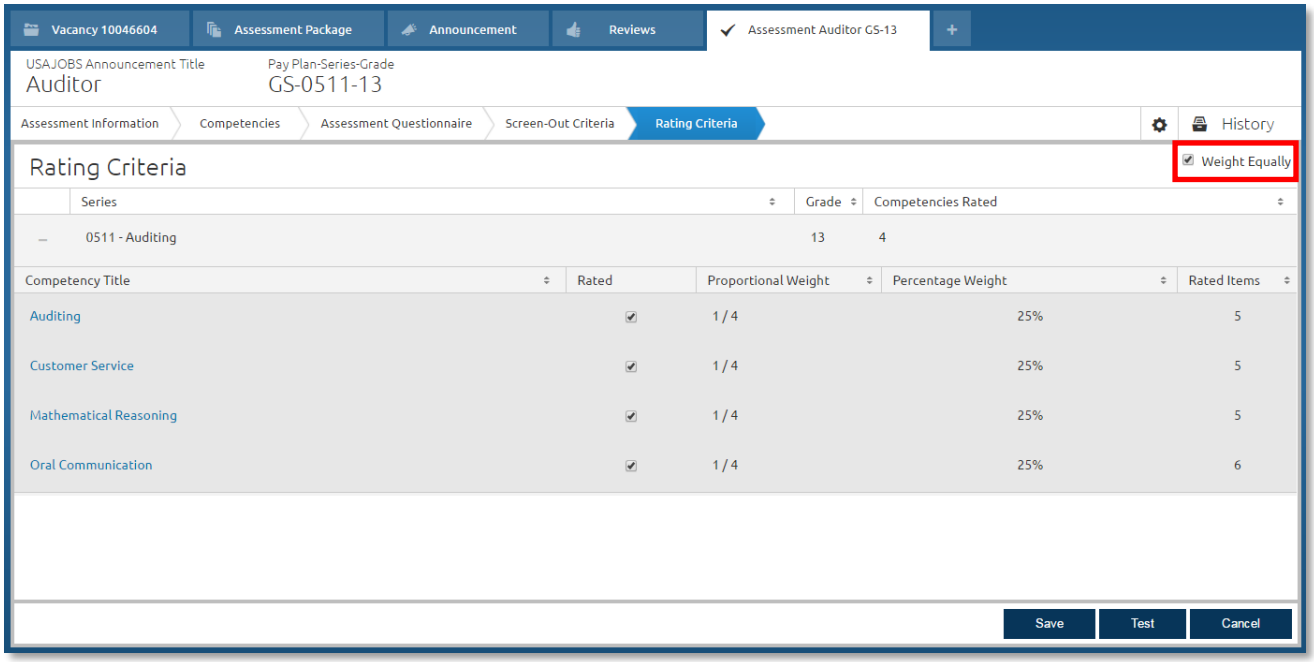
A common use case for differential weighting of competencies occurs when recruiting for multi-grade positions – for example, when job analysis documentation shows the competencies are rated differently (e.g., some are more important/critical than others) based on the grade level.

## Which competency weighting method do you intend to use for this assessment?

| Equal Weighting | Differential Weighting |
|---|---|

# Equal Weighting of Competencies

The USA Staffing system will automatically weight each of your competencies equally by default and calculate the percentage weight of each to total 100%. You can confirm this by noting that the **Weight Equally** checkbox is selected. You can also review the details by expanding the **+** button next to the rating combination on the Rating Criteria page. For example, if you have four competencies, each competency would be automatically weighted 25%.




**Note: When the Weight Equally checkbox is selected, not only is each competency weighted equally, but also each item within each competency is also weighted equally.** If you need to make adjustments to the weights of the items within a competency, you will need to uncheck the Weight Equally checkbox before doing so.


Go back to **Decision #2: How Should Competencies Be Weighted?**

Proceed to **Decision #3: How Should Items Be Weighted?**

# Differential Weighting of Competencies

Before moving forward with this approach, be sure you have the documentation to support this decision. Ask yourself the following questions:

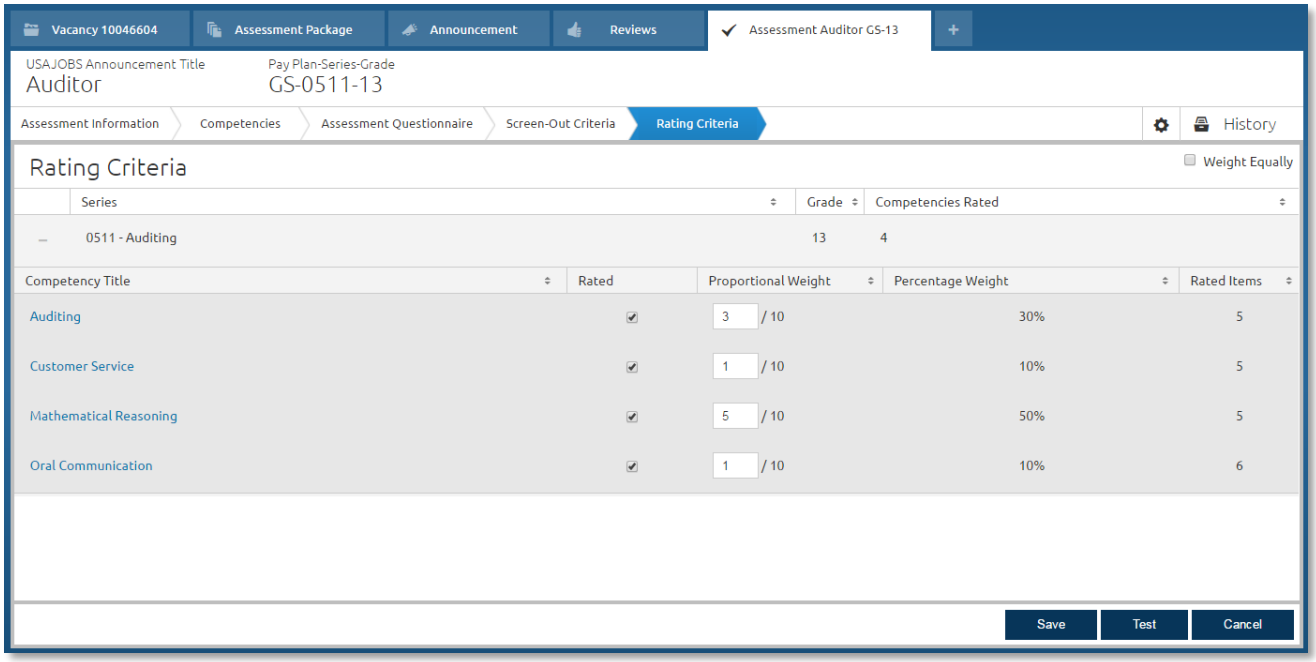
- Does your job analysis show certain competencies are more important than other competencies?
- Do you have documented approval from at least one SME to support use of this weighting scheme?
- Do you understand the implications differential weighting of competencies has on the overall assessment score?

If your answer to any of the questions above is 'No', Equal Weighting of Competencies is likely to be the more appropriate (and legally defensible) approach.

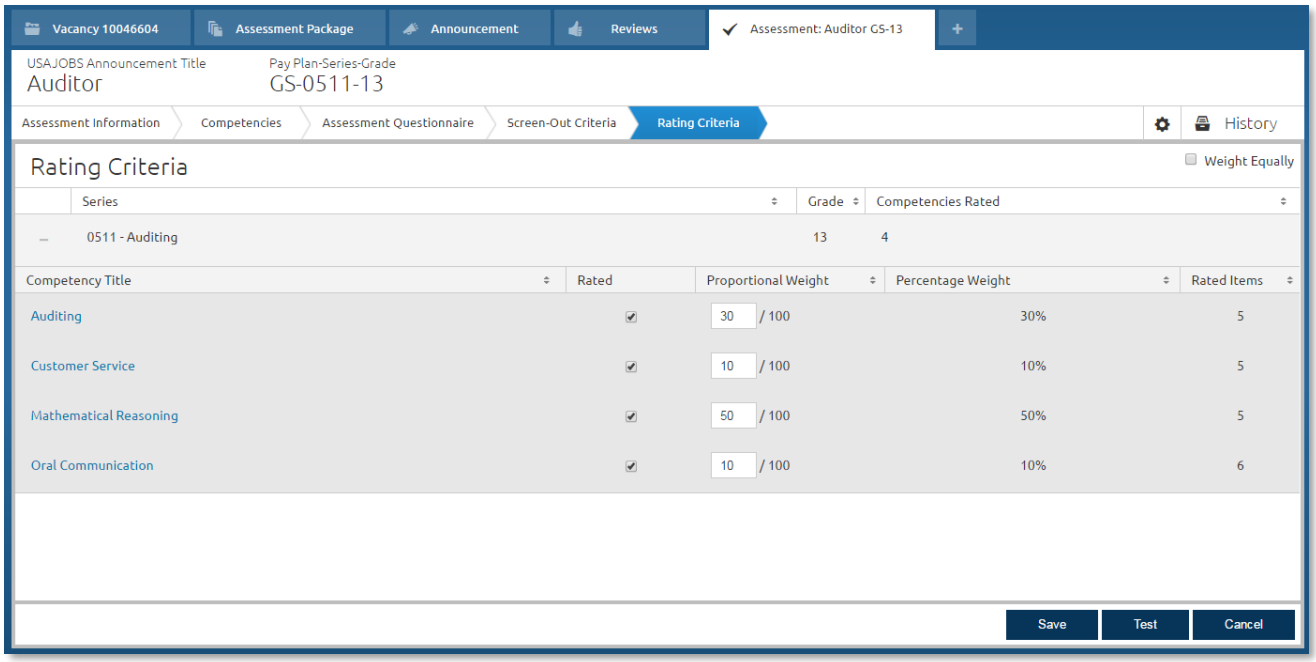
If your answers to the questions above are 'Yes', you will need to determine how much weight to assign each of the competencies in your assessment based on your supporting documentation and SME input. You will then adjust the Proportional Weights in USA Staffing to match your intended weighting scheme. Note: The option for doing this is based on your permission profile. If you are unable to complete the steps below, contact your USA Staffing office administrator.

To weight a competency differentially relative to the other competencies in USA Staffing, start by unchecking the Weight Equally checkbox. Then, enter the desired Proportional Weight for each competency. The Percentage Weights will dynamically update as the Proportional Weights are changed to help you interpret how weights are being applied and show how those weights total 100%.

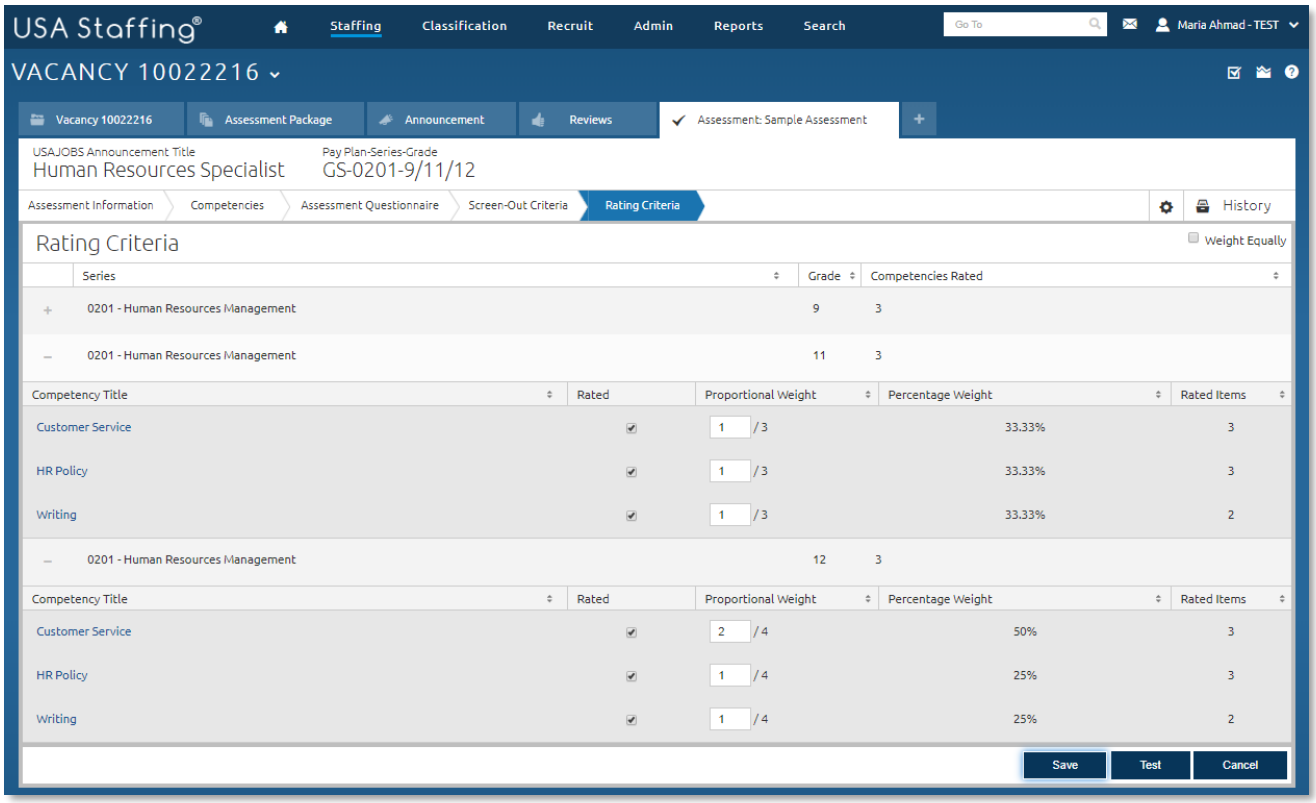
In the example below, 'Auditing' is weighted three times as much as 'Customer Service' and 'Oral Communication,' which have Proportional Weights of one. By changing the Proportional Weight for 'Mathematical Reasoning' from 1 to 5, this competency is now weighted five times as much as 'Customer Service' and 'Oral Communication.'




If you prefer to work with percentages totaling 100% instead of Proportional Weights, you can simply enter whole numbers that total to 100 in the Proportional Weights column. The denominator will automatically change to 100.




Keep in mind that competency weights are tied to the specific rating combination (i.e., adjusting the weight of a competency at one grade level does not change the weight of that competency for any other grade levels that may be included in your assessment). If you need to adjust the weight of a competency for multiple rating combinations, you can do so by expanding the **+** button next to each rating combination. The example below illustrates how competencies might be weighted differentially at two different grades.



Go back to **Decision #2: How Should Competencies Be Weighted?**

Proceed to **Decision #3: How Should Items Be Weighted?**

# Decision #3: How Should Items Be Weighted?

Before deciding whether to equally weight or differentially weight items within an assessment, it is important to understand when each practice is most appropriate. When using Competency-level Scoring, you may determine that differential weighting of items is appropriate for one competency and equal weighting of items is appropriate for another competency. If so, be sure to use the approach that is most appropriate for a given competency.

## When is it most appropriate to equally weight items?

Equally weighting items (the default setting) is appropriate when you want experience measured by each item to be considered equally when computing an applicant's score (Competency Score when using Competency-level Scoring or Total Raw Score when using Item-level Scoring). When you equally weight items, each item contributes the same to an applicant's score regardless of item type (Multiple Choice - Single Select and/or Multiple Choice - Multiple Select) or any differences in the maximum number of points possible for each item (i.e., based on the number of response options or the Base Values assigned to the response options). For example, with Competency-level Scoring, if you have 5 items linked to a competency, all items will have equal impact on the Competency Score. With Item-level Scoring, if you have 10 items (linked to a single competency), all items will have equal impact on the overall score (Total Raw Score).

Equal weighting of items within a competency is most appropriate when:

1. Job analysis ratings show tasks and competencies serving as the basis of the items are equally important,
2. There is a lack of detailed job analysis information to support differential weighting of items, and/or
3. There is a lack of SME availability to provide input into weighting of items.

**Equal weighting of items is a robust practice and is generally the most effective and defensible course of action in the absence of a clear and documented rationale for doing otherwise.**

## When is it most appropriate to differentially weight items?

The default setting within USA Staffing is to equally weight items within an assessment. However, differential weighting of items may be appropriate in cases where the experience represented by a certain item or items is judged to be more important for performance in the position and thus should have a greater impact on the applicant's score. Developing differential weighting schemes that result in meaningful and valid distinctions between applicants is more complex than it may appear and needs to be carried out with careful judgment. Below are important assumptions surrounding use of differential item weights:

1. You have documented evidence of the validity of the differential weighting plan (e.g., job analysis ratings show some tasks and competencies serving as the basis of the items are more important than others),
2. SMEs understand, support, and approve the differential weighting plan, and
3. You understand the measurement implications of differentially weighting the items.

Note: When using Competency-level Scoring, items are weighted relative to one another *within the same competency*. Therefore, adjusting the Proportional Weight of an item will only influence the Competency Score, which may not have a significant effect on the overall assessment score. That said, items with higher Proportional Weights will more heavily influence the Competency Score. For example, within a given competency, an item with a Proportional Weight of 3 carries three times as much weight when calculating a Competency Score as an item with a Proportional Weight of 1.

When working with SMEs to determine if certain items should be weighted differentially, start by equally weighting all items. Then work with the SMEs to identify which items should be weighted more than other items and by how much more. Increase Proportional Weights accordingly. Again, you must have a documented rationale for the differential weighting scheme.

## Which item weighting approach do you intend to use for this assessment?

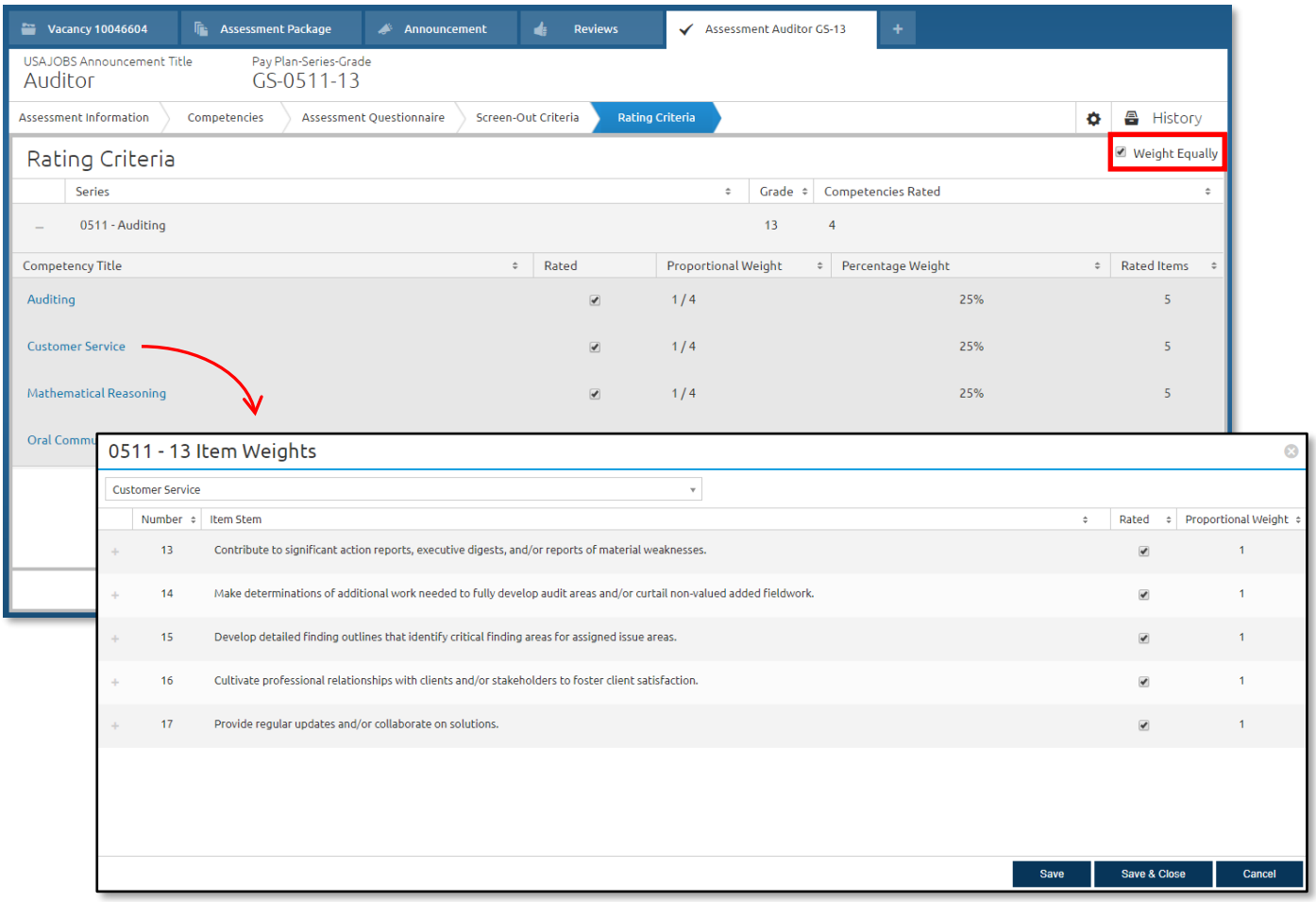
**Note: With Competency-level Scoring, you may use different approaches for different competencies.**

| Equal Weighting | Differential Weighting |
| --- | --- |

# Equal Weighting of Items

To equally weight items ensure the **Weight Equally** box is checked. This is the default setting in USA Staffing. The Proportional Weights of all items will be set to 1. This will ensure each item (within a competency or the overall assessment if using Item-level Scoring) contributes the same to an applicant's score regardless of any differences in the maximum number of points possible for each item (i.e., based on the number of response options or the Base Values assigned to the response options).

In the example below, there are five items measuring the Customer Service competency, so each item is worth 20% of the Customer Service competency score. USA Staffing does not display Percentage Weights for items, but the principle is the same as competency Percentage Weights.



If your assessment uses Competency-level Scoring, and also has one or more competencies requiring differential weighting of items, see Differential Weighting of Items.

Go back to **Decision #3: How Should Items Be Weighted?**

Proceed to **Decision #4: How Should Points Be Assigned to Item Responses?**

# Differential Weighting of Items

Before moving forward with a differential item weighting approach, be sure you have the documentation to support this decision. Ask yourself the following questions:

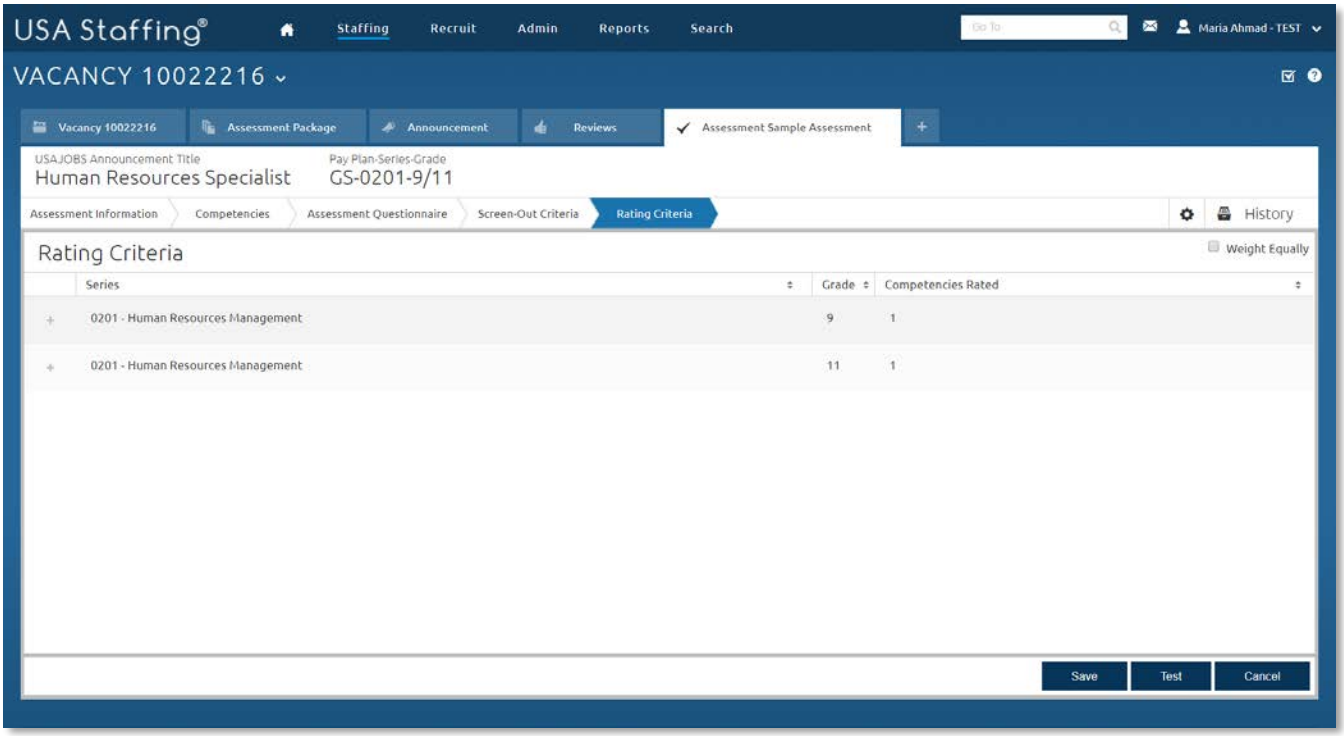
- Does your job analysis show tasks and competencies serving as the basis of certain items are more important than others?
- Do you have documented approval from at least one SME to support use of this weighting scheme?
- Do you understand the implications differential weighting of items has on the assessment score?

If your answer to any of the questions above is 'No', it may be best (and more legally defensible) to use Equal Weighting of Items.

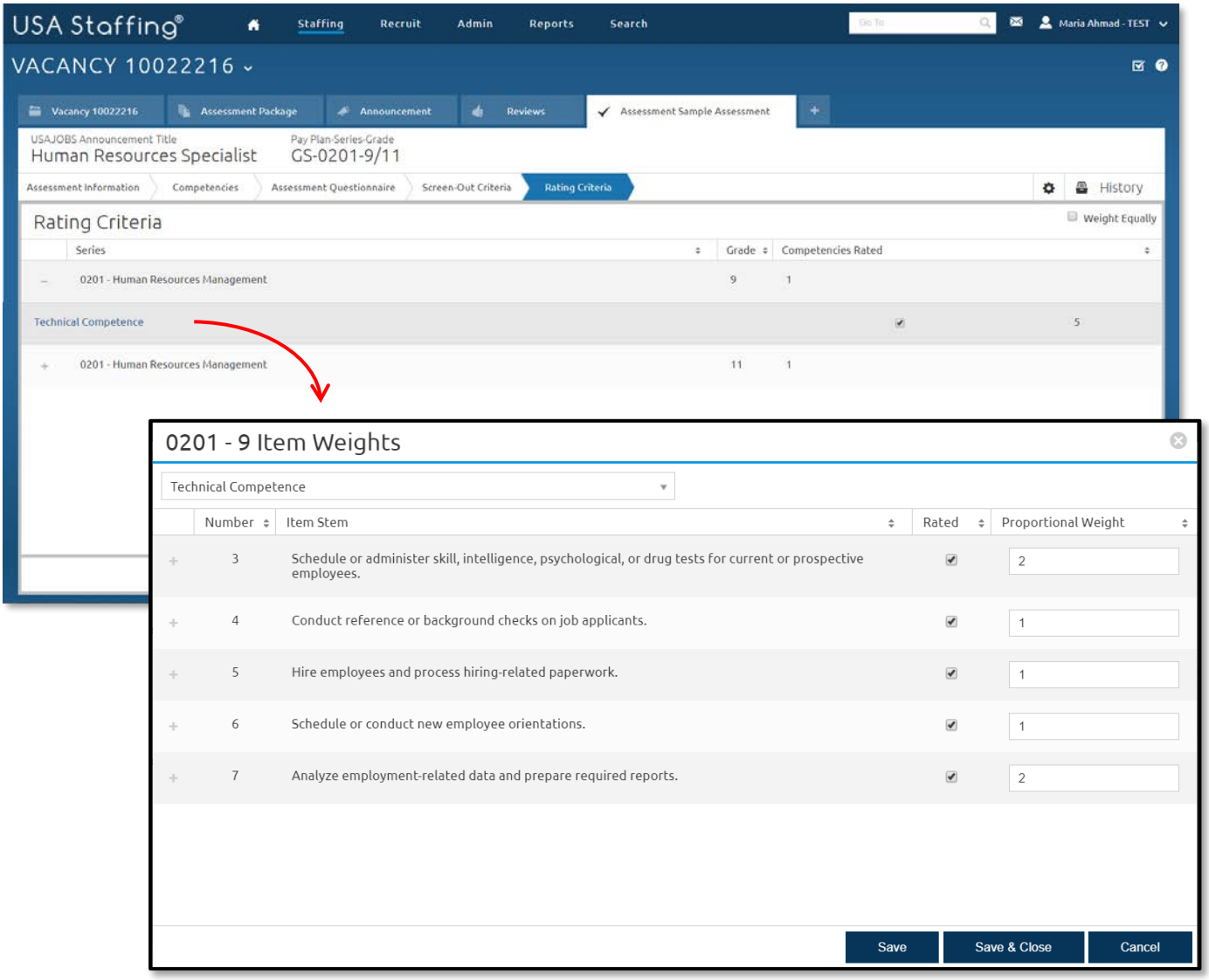
If your answers to the questions above are 'Yes', you will need to determine how much to weight each of the items relative to one another. This decision must be based on your supporting documentation (i.e., job analysis) and SME input. For example, if your job analysis and SME(s) support weighting an item twice as much as another item, you can assign the former item a Proportional Weight of 2 and the latter item a Proportional Weight of 1. The item with a Proportional Weight of 2 will have twice as much influence on the Competency Score (or overall assessment score when using Item-level Scoring) compared to the item with a Proportional Weight of 1.

Keep in mind that when using Competency-level Scoring, items are weighted relative to one another *within the same competency*. Therefore, adjusting the Proportional Weight of an item will only influence the Competency Score, which may not have a significant effect on the overall assessment score.

To differentially weight items in USA Staffing, start by unchecking the **Weight Equally** checkbox on the Rating Criteria page. Note: The ability to do this is based on your permission profile. If you are unable to complete this step, contact your USA Staffing office administrator.

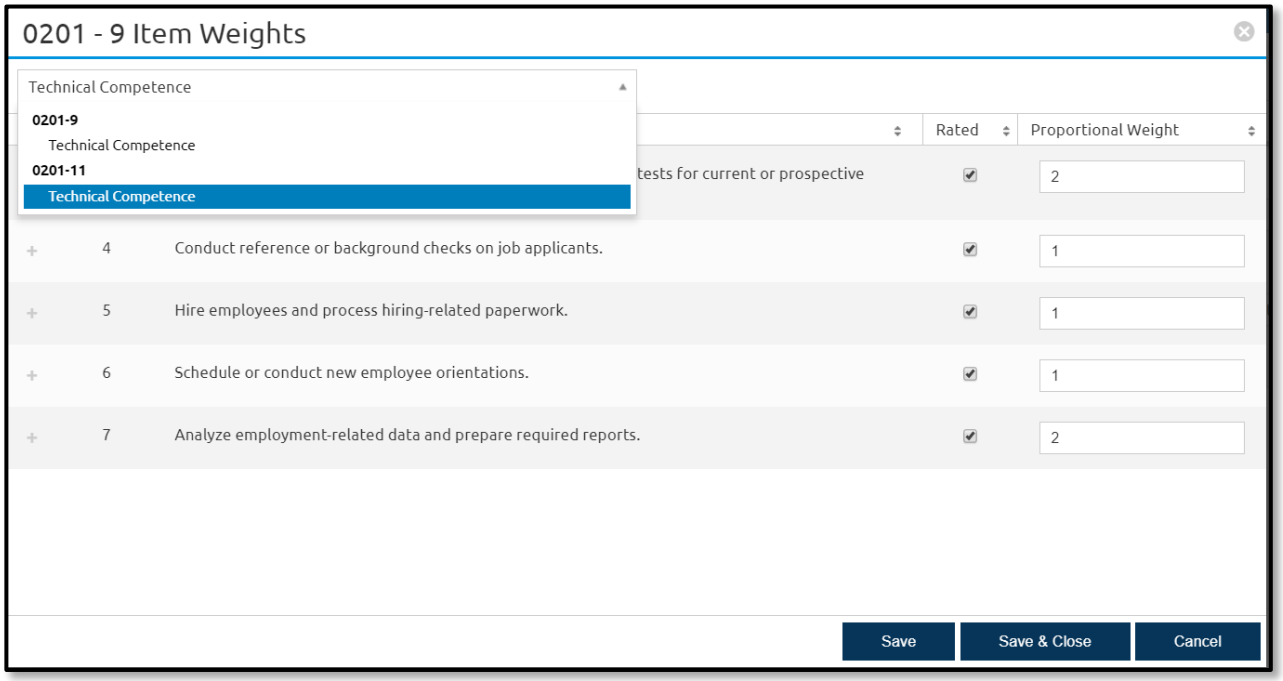


Then, expand the **+** button next to the appropriate rating combination, and click on the Competency Title (link) to view and change the Proportional Weight associated with a given item to match your intended weighting scheme. In the example below, items 3 and 7 are weighted twice as much as items 4, 5, and 6.




If you are using Competency-level Scoring and have one or more competencies that require equal weighting of items, there is no action needed on the other competencies. The system will automatically weight each item equally relative to other items under a given competency unless their Proportional Weight is adjusted.

Keep in mind that item weights are tied to the specific rating combination. Adjusting the weight of an item at one grade level does not change the weight of that item for any other grade levels that may be included in your assessment. If you need to adjust the weight of an item for multiple rating combinations, you can quickly navigate between grades and/or competencies by changing the dropdown menu at the top of the Item Weights popup window.




Go back to **Decision #3: How Should Items Be Weighted?**

**Proceed to Decision #4: How Should Points Be Assigned to Item Response Options?**

## Decision #4: How Should Points Be Assigned to Item Response Options?

At this point, you should have both your competency and item weights identified and entered into USA Staffing as appropriate. The next step is to review and if needed, assign Base Values (the points associated with each response option) to each of your items. Start by reviewing the format of items included in your assessment questionnaire (i.e., Multiple Choice - Single Select and/or Multiple Choice - Multiple Select) and the rating scales used for those items (i.e., generic/default scales and/or customized scales) considering the information below.

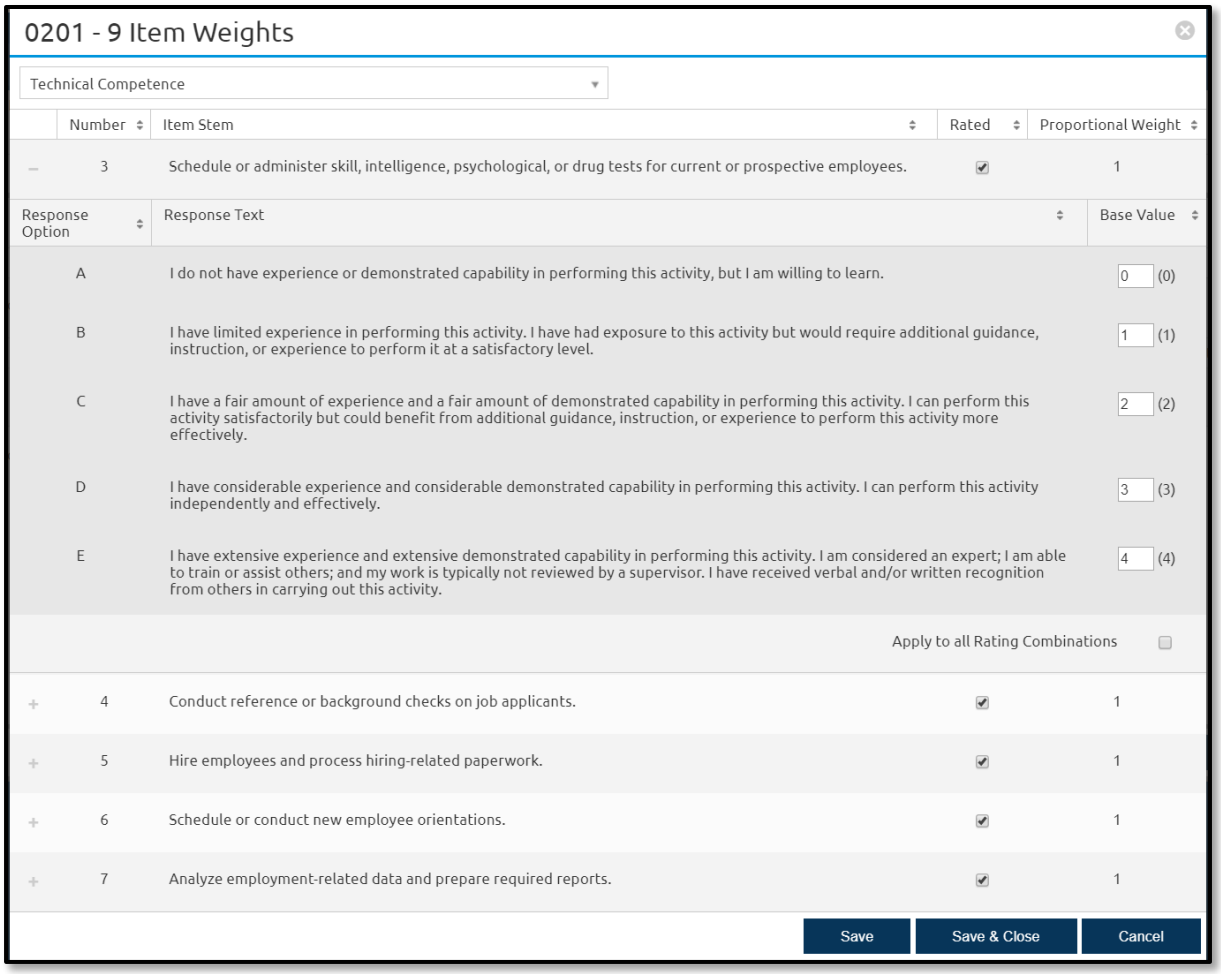
## Multiple Choice - Single Select Items

There are several generic rating scales available for your use with General Schedule examining[1] in USA Staffing:

- Experience/Demonstrated Capability (Entry Level)
- Experience/Demonstrated Capability (Higher Complexity)
- General Schedule (Default)
- Level of Knowledge
- Level of Knowledge (Higher Complexity)
- Technical Competence

Each of these rating scales has five response options, reflecting gradually increasing levels of experience/knowledge/proficiency with each higher response option. If you are using one of these generic scales for your questionnaire items, the response options, as well as the associated Base Values (0-1-2-3-4), will automatically populate. The rating scales and Base Values can be viewed from the Rating Criteria page as shown in the screenshot of one of the USA Staffing generic scales below. To note, unless another option is selected, the General Schedule (Default) rating scale is used for assessments developed using the Weight-Based Rating Method.

[1] A Wage Grade (Default) rating scale is available for use with the Job Element Rating Method.



0201 - 9 Item Weights

Technical Competence

| | Number | Item Stem | Rated | Proportional Weight |
|---|---|---|---|---|
| – | 3 | Schedule or administer skill, intelligence, psychological, or drug tests for current or prospective employees. | ☑ | 1 |

| Response Option | Response Text | Base Value |
|---|---|---|
| A | I do not have experience or demonstrated capability in performing this activity, but I am willing to learn. | 0 (0) |
| B | I have limited experience in performing this activity. I have had exposure to this activity but would require additional guidance, instruction, or experience to perform it at a satisfactory level. | 1 (1) |
| C | I have a fair amount of experience and a fair amount of demonstrated capability in performing this activity. I can perform this activity satisfactorily but could benefit from additional guidance, instruction, or experience to perform this activity more effectively. | 2 (2) |
| D | I have considerable experience and considerable demonstrated capability in performing this activity. I can perform this activity independently and effectively. | 3 (3) |
| E | I have extensive experience and extensive demonstrated capability in performing this activity. I am considered an expert; I am able to train or assist others; and my work is typically not reviewed by a supervisor. I have received verbal and/or written recognition from others in carrying out this activity. | 4 (4) |

Apply to all Rating Combinations ☐

| | | | | |
|---|---|---|---|---|
| + | 4 | Conduct reference or background checks on job applicants. | ☑ | 1 |
| + | 5 | Hire employees and process hiring-related paperwork. | ☑ | 1 |
| + | 6 | Schedule or conduct new employee orientations. | ☑ | 1 |
| + | 7 | Analyze employment-related data and prepare required reports. | ☑ | 1 |

Save | Save & Close | Cancel

Note: If you use the Yes/No scale, an additional generic rating scale available in USA Staffing, the 'Yes' response will automatically be assigned 4 points, and the 'No' response will receive 0 points.

If your agency has developed customized (e.g., item-specific) response scales for some or all of your Multiple Choice - Single Select items, you will need to input the Base Values for these items into USA Staffing. (The Base Value for all response options defaults to 0 for items not associated with an existing generic/default USA Staffing rating scale.) When working with SMEs to assign Base Values to customized response options for Multiple Choice - Single Select items remember to:

- Assign the highest points to the response options that represent a greater proficiency level or have a higher importance rating based on the job analysis
- Use a logical rationale based on supporting job analysis information when determining the worth of each response option.

Assigning Base Values in a consistent, graduated fashion (e.g., 0-1-2-3-4) generally ensures the maximum spread or distribution of applicant scores and is the most defensible course of action in the absence of a clear and documented rationale for doing otherwise. Also, response options generally should be presented to applicants in a logical order. Presenting response options in an illogical order may cause confusion, which may open your agency up to unnecessary legal risk.

Users with advanced experience in developing questionnaires may have justification for assigning points in other ways (i.e., other than increasing increments of 1). In these cases particularly, it's critical that you have a logical and clearly documented rationale for how you are assigning your Base Values (e.g., based on job analysis results and/or SME input).

A few additional points to keep in mind when assigning your Base Values:

- Use the smallest values possible to represent the desired weights of your response options (e.g., 0, 1, 2, 3, 4 rather than 0, 3, 6, 9, 12). Because Proportional Item Weights are used to determine an item's weight relative to other items when computing a total score, larger-than-necessary Base Values (e.g., 0, 3, 6, 9, 12) not divided by the greatest common divisor (in this case 3) are redundant with the item weights. That said, USA Staffing will accommodate larger-than-necessary Base Values by reducing them (i.e., by the greatest common divisor); however, these values may be harder to explain. Note: USA Staffing will not reduce Base Values when using Response-level Scoring, so ensure the points you enter are the ones you intend to assign.
- Unless certain items are assigned Proportional Item Weights larger than '1' (the default for Competency-level and Item-level Scoring), USA Staffing will ensure that each item is weighted equally to other items under a given competency (or for the overall assessment when using Item-level Scoring), regardless of the Base Values you assign. Proportional Competency and Item Weights cannot be used with Response-level Scoring.
- Response option Base Values are weighted proportionally relative to one another. For example, a response option with a Base Value of 3 is weighted 3 times as much as a response option with a Base Value of 1.

To add custom response options and Base Values at the same time you can use the **Copy from File** function, by entering them in square brackets ahead of each response (e.g., [1] A. Response). For detailed steps, see the USA Staffing online help pages: Adding a response to a questionnaire item, Copying text from a file, and Copy from File Import Template.

You also can assign and/or adjust the Base Values for each response option from the Rating Criteria page. To do so:

1. Click the appropriate Competency Title link.
2. Click the + next to the appropriate item number.
3. Enter the appropriate Base Values in the textboxes.

## Multiple Choice - Multiple Select Items

For Multiple Choice – Multiple Select items (also known as "Select-All-That-Apply" items), the Base Value for the "None of the above" option must be set as 0. However, the remaining response options can be weighted equally (i.e., Base Values are assigned a Base Value of 1) or differentially based on input from your SMEs.

- If equal weighting of response options is appropriate, assign each response option a Base Value of 1, except for the "None of the above" response option which should be assigned a Base Value of 0.
- If certain response options should be weighted more than others, work with SMEs to identify which response options should be weighted more heavily relative to other response options and by how much.

When working with SMEs to assign Base Values to customized response options remember to:

- Use a logical rationale based on supporting job analysis information when determining the worth of each response alternative.
- Start by equally weighting all response options. Then, as appropriate, work with the SMEs to identify which response options should be weighted more than others and by how much more. Increase Base Values accordingly, documenting the SMEs' rationale.

Assigning equal Base Values is recommended as the most defensible course of action in the absence of a clear and documented rationale for doing otherwise. However, differential weighting of response options may be appropriate in some cases (i.e., based on your job analysis results and SME input).

Differential weighting of response options (assigning different Base Values) within a Multiple Choice – Multiple Select item indicates that a certain response or responses within an item should have a greater impact on the applicant's score on that item. Response options with greater Base Values more heavily influence the Item Score. For example, if SMEs indicate the experience represented by one response option is three times as important as another response option within the same item, you would give the more important response option a Base Value of 3 and the other response option a Base Value of 1. The response option with a Base Value of 3 will have three times greater an impact on the Item Score compared to the response option with a Base Value of 1.

Additional points to keep in mind when assigning your Base Values:

- Use the smallest values possible to represent the desired weights of your response options (e.g., 1, 1, 2, 1, 0 rather than 2, 2, 4, 2, 0). Because Proportional Item Weights are used to determine an item's weight relative to other items when computing a total score, larger-than-necessary Base Values (e.g., 2, 2, 4, 2, 0) not divided by the greatest common divisor (in this case 2) are redundant with the item weights. That said, USA Staffing will accommodate larger-than-necessary Base Values by reducing them (i.e., by the greatest common divisor); however, these values may be harder to explain. Note: USA Staffing will not reduce Base Values when using Response-level Scoring, so ensure the points you enter are the ones you intend to assign.
- Unless certain items are assigned Proportional Item Weights larger than '1' (the default for Competency-level and Item-level Scoring), USA Staffing will ensure that each item is weighted equally to other items under a given competency (or for the overall assessment when using Item-level Scoring), regardless of the Base Values you assign. Proportional Competency and Item Weights cannot be used with Response-level Scoring.
- Response option Base Values are weighted proportionally relative to one another. For example, a response option with a Base Value of 3 is weighted 3 times as much as a response option with a Base Value of 1.

For more information on using Multiple Choice – Multiple Select items, please see the Multiple Choice – Multiple Select Items Quick Reference Guide.

## Final Step: Quality Review

You have now completed the Assessment Scoring and Weighting Decision Guide for your assessment questionnaire in USA Staffing. We recommend you carefully review your work to ensure all competency weights are correct, all items are linked to the correct competency, all item weights are specified as intended, and all Base Values are entered correctly.

Final Response Option Values can be reviewed by navigating to the Rating Criteria page, clicking on the competency title, and expanding the item(s) to show Response Options. The Final Response Option Values are displayed in parentheses **( )**. If you're using Competency-level or Item-level Scoring, you will want to confirm that these values are accurate based on the corresponding Proportional Weights specified for both items and competencies. If you're using Response-level scoring, the Final Response Option Values will always be the same as the Base Values. For additional details on scoring and testing protocols for Competency-level and Item-level Scoring, see the technical explanation of the Weight Based Rating Method.

To verify that your assessment is producing the expected results, you can use the **Test Plan** scenarios to confirm your scoring results are matching the expected outcomes. For detailed steps on testing your assessment, see USA Staffing online help pages: Test Plan and Adding a test scenario to an assessment package. This final quality review stage is critical to ensure the assessment scores in USA Staffing are accurate and working as you intended.

# Glossary

| Term | Definition |
|---|---|
| **Base Values** | The values associated with each response option before any adjustments are made by the USA Staffing system (e.g., to account for item/competency weights). Also called the Baseline Response Option Values. |
| **Competency** | A measurable pattern of knowledge, skills, abilities, behaviors, and other characteristics that an individual needs to perform work roles or occupational functions successfully. |
| **Competency Score** | In Competency-level scoring, the average of Item Scores within each competency. |
| **Differential Weighting** | Assigning more weight to some competencies or items relative to others within the same assessment. |
| **Equal Weighting** | Assigning equal weight to competencies and items relative to others within the same assessment. The default option in USA Staffing when using Competency-level or Item-level Scoring to ensure each item within a competency and each competency within an assessment is provided equal weight in determining an applicant's Final Score. |
| **Final Response Option Values** | Base Values that have been adjusted to take into account item/competency weights, differences in the maximum number of points possible for each item, and/or the number of response options under a given item. For Response-level scoring, Final Response Option Values are not adjusted (they are always the same as the item Base Values). |
| **Final Score** | The applicant's overall score for a given rating combination, determined by transmuting the Total Raw Score to a 70 to 100 scale. Also called the final Transmuted Score. |
| **Item** | A scored question on an assessment questionnaire. |
| **Item Scores** | The Final Response Option Values associated with the response option(s) selected by an applicant to a given item. |
| **Percentage Weight** | The Proportional Weight multiplied by 100. |
| **Proportional Weight** | In Competency-level and Item-level Scoring, the relative weight an item or competency will receive in determining the applicant's Final Score. |
| **Rating Scale or Response Scale** | The response options and associated base values used to determine an applicant's experience, knowledge, or proficiency. |
| **Subject Matter Expert (SME)** | A person with bona fide expert knowledge about what it takes to do a particular job (e.g., first-level supervisors, high performing incumbents in the same or very similar position). |
| **Total Raw Score** | A score that is calculated based on the selected scoring method and is used in determining the applicant's Final Score. For Competency-level scoring, it is the sum of the applicant's Competency Scores. For Item-level and Response-level scoring, it is the sum of the applicant's Item Scores. |